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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,119	06/10/2002	Reiner Gieck	449122022600	1678

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EXAMINER	
AGHDAM, FRESHTEH N	
ART UNIT	PAPER NUMBER
2611	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/048,119	GIECK, REINER	
	Examiner	Art Unit	
	Freshteh N. Aghdam	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☒ Claim(s) *5-9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/10/2006 have been fully considered but they are not persuasive.

Applicant's Argument: On page 2, applicant argues that the claimed invention is not taught or suggested by Lepitre "determination of different transmission methods, as required in the claimed invention."

Examiner's Response: Contrary to the applicant's argument, Lepitre discloses determining (i.e. defining) and storing (providing a list of dmax as a function of baud rate and associated carrier frequency) at least one transmission method with at least one transmission speed that represent maximum data throughput rate (dmax) see (Col. 1, Lines 35-39; Col. 2, Lines 66-67; Col. 3, Lines 1-30).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Lepitre et al (US 5,914,993).

As to claim 1, Lepitre teaches determining and storing (i.e. rate defining means) at least one transmission method with at least one transmission speed (i.e. rate/ carrier) that represents a maximum data throughput rate (Col. 1, Lines 35-43; Col. 2, Lines 66-67; Col. 3, Lines 1-30) for different line parameters of lines (i.e. transfer function of the line and signal to noise ratios of the line); measuring the line parameters of the line using the at least one transmission method (Col. 1, Lines 35-57; Col. 2, Lines 57-65); and selecting the at least one transmission method having the transmission speed (i.e. rate) in which the measured and stored line parameters are most compatible (Col. 1, Lines 35-39).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lepitre et al, and further in view of BROTHERS (US 2002/0016794).

As to claim 2, Lepitre teaches all the subject matter claimed above, except for the line parameters are represented by the attenuation and running time of the line and by interference signals on the line. BROTHERS teaches that the line parameters are

represented by the attenuation, interference, and running time of the line (Par. 19). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of BROTHERS with Lepitre in order to more efficiently transmitting a signal by determining the line parameters responsive to the line attenuation, running time of the line and by interference signals on the line (Par. 19).

As to claim 4, Lepitre teaches the maximum data rate for different line parameters is determined with different transmission methods and transmission speeds, by selecting the transmission methods in the frequency range of which the line parameters demonstrate the least variations, and in which the interference of the measured interference signal has the least effect (Col. 1, Lines 35-56; Col. 2, Lines 37-65). Lepitre is not explicit about the line parameters are represented by the attenuation and running time of the line and by interference signals on the line. BROTHERS teaches that the line parameters are represented by the attenuation, interference, and running time of the line (Par. 19). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of BROTHERS with Lepitre in order to more efficiently transmitting a signal by determining the line parameters responsive to the line attenuation, running time of the line and by interference signals on the line (Par. 19).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lepitre et al and BROTHERS, further in view of Zirwas (US 6,798,855).

As to claim 3, Lepitre and BROTHERS teach all the subject matter claimed above, except for the running time being determined by a measurement of the phase

difference between two signals with different frequencies. Zirwas teaches that the running time is determined by a measurement of the phase difference between two signals (Col. 7, Lines 30-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Zirwas with Lepitre and BROTHERS in order to enhance signal transmissions by determininig the running time from measuring the phase difference between two signals with different frequencies.

Allowable Subject Matter

Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Freshteh Aghdam
December 12, 2006

KEVIN BURD
PRIMARY EXAMINER